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REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. In view of the above amendment, Applicants believe the pending application is in condition for allowance. Claims 1-3, 15-16, 20-21 and 23 are pending.

Summary of the Office Action

Claims 1-4, 15 16, and 20-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Deane et al., U.S. Patent No. 6,686,229.

Summary of the Response to the Office Action

Claims 1 and 20 have been amended to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Further, each of the features in claims 4 and 22 have been included into independent claims 1 and 20, respectively. Claims 4 and 22 have been canceled by the current amendment. Accordingly, claims 1-3, 15, 16, 20, 21, and 23 are presently pending. Reconsideration of this application, as amended, is respectfully requested.

Rejections under 35 USC § 103(a)

Claims 1-4, 15 16, and 20-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Deane et al., U.S. Patent No. 6,686,229. Applicants respectfully traverse this rejection as being based on a reference that neither describes nor suggests the novel combination of features currently recited in amended independent claims 1 and 20. For example, amended

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independent claim 1 recites, among other features, "forming an active region including the high-concentrated N+ layer by applying an active photoresist pattern by printing, wherein the active region is formed by sequentially removing the high-concentrated N+ layer and the semiconductor layer using the active photoresist pattern formed by printing as a mask," and "sequentially removing the conductive layer including the high-concentrated N+ layer above the channel region by using the photoresist layer pattern as a mask to a source/drain electrode." In addition, amended independent claim 20 recites, among other features, "forming a gate line on a substrate, wherein the step of forming the gate line includes applying a gate photoresist pattern on the substrate by printing; removing the gate photoresist pattern."

In contrast to the presently claimed invention recited in amended independent claims 1 and 20, Deane et al. describes that the metallisation layer 23 is then used as an etch mask to carry out a back-channel etching step to etch away the doped amorphous silicon layer 19 except under the metallisation layer as recited in lines 1 to 4 of column 6. That is, in Deane et al., the metallisation layer 23 is then used as an etch mask to carry out a back-channel etching step to etch away the doped amorphous silicon layer 19.

On the contrary, the presently claimed invention describes that the active region is formed by sequentially removing the high-concentrated N+ layer and the semiconductor layer using the active photoresist pattern formed by printing as a mask. Accordingly, the metallisation layer 23 of Deane et al. used as an etch mask differs from the active photoresist pattern as a mask of the claimed invention.

Therefore, Applicants respectfully submit that Deane et al. fails to teach or suggest

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"forming an active region including the high-concentrated N+ layer by applying an active photoresist pattern by printing, wherein the active region is formed by sequentially removing the high-concentrated N+ layer and the semiconductor layer using the active photoresist pattern formed by printing as a mask, and "sequentially removing the conductive layer including the high-concentrated N+ layer above the channel region by using the photoresist layer pattern as a mask to source/drain electrodes," as recited in amended independent claim 1. In addition, Applicants respectfully submit that Deane et al. fails to teach or suggest "forming a gate line on a substrate, wherein the step of forming the gate line includes applying a gate photoresist pattern on the substrate by printing; removing the gate photoresist pattern," as recited in amended independent claim 20.

For at least the above reasons, Deane et al. fails to teach or suggest each and every feature recited in amended independent claims 1 and 20. Accordingly, Applicants respectfully request that the 35 U.S.C. § 103(a) rejections of independent claims 1 and 20, as amended, be withdrawn. Further, Applicants respectfully request that the 35 U.S.C. 103(a) rejections of dependent claims 2-3, 15, 16, 21, and 23 be withdrawn at least because of their dependence on amended independent claims 1 and 20, and for additional features that they recite.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete

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response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Jun S. Ha, Registration No. 58,508, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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